

SYSTEM AND METHOD FOR GENERATING DISTRIBUTED INFORMATION SYSTEMS

ABSTRACT OF THE DISCLOSURE

An architecture for developing a distributed information system comprises a service definition tool for generating service protocols as a service definition. Each service protocol includes a plurality of messages. The messages include incoming messages and outgoing messages. Each message carries a plurality of data fields. A component development tool generates a first and a second plurality of components that implement and consume services. Each component in the first plurality of components represents a physical entity in the distributed information system. Each component in the second plurality of components represents a logical entity in the distributed information system. A system development tool generates a plurality of component instances based on the first and the second plurality of components. An engine software program runs on each of a plurality of networked nodes. The engine software program provides a programmable run-time environment for hosting the plurality of component instances and supporting communication between component instances.